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PERSICARIA CAPITATA (POLYGONACEAE) NATURALIZED IN TEXAS

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ABSTRACT

Persicaria capitata is documented as a naturalized species in the Texas flora. It was discovered in a calcareous prairie in Chambers County and is speculated to have arrived there from propagules from cultivated landscape plants in the nearby Houston area.

KEY WORDS: *Persicaria*, *Polygonum*, Polygonaceae, *chênière*, Texas

Continued field studies in Texas have resulted in the discovery of the following species, which is here reported as new to the naturalized flora of the state.

Persicaria capitata (Buchanan-Hamilton ex D. Don) H. Gross (pink-head knotweed)
Synonym = *Polygonum capitatum* Buchanan-Hamilton ex D. Don.

Voucher specimen. **TEXAS**. Chambers Co.: Fisher Tract, 3.3 mi S of FM 565 and jct. of FM 3180 on FM 3180, then 1.8 mi E on private road to cooling station office, from office head 0.4 mi S along beach and chenier shell ridge along Trinity Bay, 24 May 2013, *Singhurst 19352* (BAYLU). Figure 1.

Persicaria capitata was discovered in Chambers County of the Gulf Coast and Prairies Ecoregion. The surrounding upland is a natural *chênière* (coastal woodlot) overlain by shell and black clay soils that was dominated by *Celtis laevigata*, *Ulmus crassifolia*, *Quercus nigra*, *Maclura pomifera*, *Sabal minor*, *Cornus drummondii*, *Ilex vomitoria*, *Malvaviscus drummondii*, *Opuntia humifusa*, *Yucca* sp., *Vitis mustangensis*, and *Campsis radicans*. The specific site where *Persicaria capitata* occurred was a calcareous prairie opening dominated by *Spartina spartinae*, *Schizachyrium scoparium*, *Onosmodium bejariense*, *Verbena xutha*, *Stachys drummondii*, *Centaurea americana*, *Solidago altissima*, *Ambrosia artemisiifolia*, *Calyptocarpus vialis*, and *Allium canadense*.

Plants of the *Persicaria capitata* population were decumbent and rooting at nodes. The colonies included three that were approximately 2 meters x 2 meters and four smaller ones approximately 0.25 meters x 0.25 meters with sprawling stems which appeared to be locally spreading.

Pink-head knotweed is occasionally used as a ground cover in the Harris County (Houston), Texas area, particularly in botanical gardens such as Mercer Arboretum and similar circumstances. It appears likely that the seed and/or other propagules of this occurrence originated from such local landscape settings and may be spread by episodes of severe storm events on the Gulf Coast.

Figure 1. *Persicaria capitata* (*Singhurst 19352*, BAYLU). Photo by Jason Singhurst, 24 May 2013.

The species is distinctive in its prostrate habit, prominent maroon-burgundy chevron on each leaf, and capitate inflorescences of light pink flowers.

Persicaria capitata is a native of southeast Asia (China, Bhutan, northern India, Malaysia, Myanmar, Nepal, Sikkim, Sri Lanka, Thailand, and Vietnam (Anjen et al. 2003). The species has been reported as naturalized in Taiwan (Hsu et al. 2004) and Brazil, Colombia, South Africa, Costa Rica, Argentina, El Salvador and the USA (Tropicos.org 2013). In the USA, *P. capitata* has been reported from Hawai'i (Wagner et al. 1990), including O'ahu and Maui (Oppenheimer & Bartlett 2002), Oregon (Rice 2013), California (Hickman 1993), and Louisiana (Hinds & Freeman 2005).

Treatments vary as to circumscriptions of *Polygonum* and *Persicaria* (including *Tovara*) of the Polygonaceae. They were treated as separate genera in Correll and Johnston (1970) but more recent treatments of Texas species have combined them all into *Polygonum* (Johnston 1990; Hatch et al 1990; Jones et al. 1997; Diggs et al. 1999; Turner 2003). Recent evidence (Fonse Decraene and Akeroyd 1988; Frye & Kron 2003), however, supports a division of *Polygonum* and *Persicaria*, a disposition used in the Flora of North America (Hinds & Freeman 2005) and followed here.

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